

REMARKS

Claims 1-4 remain pending in this application. Claims 1 and 3 are the independent claims. Claims 1-3 have been amended. No new matter has been added. Favorable reconsideration is respectfully requested.

In the January 2, 2002 Office Action, claims 1-4 were rejected under 35 U.S.C. 103 as unpatentable over U.S. Patent 6,278,887 to Son et al. ("Son") in view of U.S. Patent 6,332,074 to Spitaletta et al. ("Spitaletta"). The patent number of the latter reference is misidentified in the Office Action, but the applicant presumes that the patent number supplied hereinabove is the intended one.

Applicant respectfully submits the following comments.

First, Son operates very differently from the present invention. According to Son reference, when an incoming call is detected, a back light is turned on. The back light triggered by the incoming call can be set on a timer allowing the back light to be automatically turned off unless a keystroke is entered within a given timeout period (see: col. 7, lines 36-49 and Fig. 5).

According to the present invention, by contrast, upon power-on of a portable telephone, a back light is turned off and an LCD is turned on. At this point, when a call is set up according to a SEND key input by a user, or when a predetermined period of time has elapsed after the SEND key is input, the back light and LCD are turned off.

When the user then ends the call by, for example, pressing an END key, the portable telephone recovers its initial state, in which the back light is maintained in the turned off state and the LCD is turned on.

Second, an object of the present invention is to provide a method for saving battery power consumption by controlling the display of a portable telephone during a call connection triggered by the user's call origination to establish a call. For this purpose, it is first checked whether a user of the portable telephone inputs a specific key, a SEND key, for call origination. Son, on the other hand, which determines only whether a keystroke is entered by a user or whether an incoming call is received (see: Figs. 4 and 5), does **not** disclose the step of checking whether a SEND key is entered for the purpose of saving battery power consumption by controlling the display during a call connection, as in the subject invention.

Third, in the subject invention, when a call is set up according to a SEND key input or when a predetermined period of time has elapsed after the SEND key is input, the display is turned off. In other words, the power supplied to the display from the battery is deactivated to turn off the display during a call connection triggered by the user's call origination to establish a call. Contrary to this, in Son, when a keystroke is entered by the user, or when an incoming call is received, a timer is set up. If a keystroke is entered within a given timeout period, the timer is re-set. If a keystroke is

not entered before expiry of the timeout period, the back light is turned off to deactivate power.

In other words, Son's timeout period is set **when an incoming** call is detected, whereas the timeout period for the present invention begins **when the SEND key** is activated.

Further, in Son, since the timeout period is re-set in response to a keystroke, the time duration until the back light is ultimately turned off is not constant, whereas the timeout period of the present invention is a predetermined constant time period after the SEND key is activated.

In view of the above, applicant respectfully submits that the present invention would not have been obvious in view of Son, nor could the disclosure in Spitaletta have served to make up for these deficiencies.

For purposes of clarity, however, applicant has amended claim 1 to emphasize its differences over the prior art. The invention, as recited in claim 1 as amended, accordingly:

- (a) "checks whether a user of said telephone activates said SEND key to originate a call from said telephone"; and
- (b) deactivates "the power supplied to the display in response to said

call being originated from said telephone due to said activation of
said SEND key.”

Son checks whether any key is activated for any purpose, but does not check
“whether a user of said telephone activates said SEND key to originate a call from said
telephone” as explicitly required by the language of present invention as recited in claim
1. Moreover, Son fails to disclose deactivation of the power supplied to the display “in
response to said call being originated from said telephone due to said activation of said
SEND key.” Son, instead, deactivates the power in the absence of activation of any key
or upon acceptance of a call by the user. Nowhere does Son disclose or suggest
deactivation of the power to the display of a telephone in response to initiating or
originating a call from that telephone. In fact, failure of the Son reference to disclose
power deactivation to a phone in response to that phone’s call origination suggests the
non obviousness of this inventive aspect recited in applicant’s claim 1 as amended.

Spitaletta discloses a phone having a SEND KEY, but likewise fails to disclose
or suggest deactivating the telephone’s display power in response to call origination from
that telephone. Spitaletta accordingly fails to make up for the deficiencies in Son. Claim
1 is therefore believed to be patentable over the cited references for at least these
reasons.

Claim 3 as amended to emphasize its differences over the prior art, similarly,

requires:

(a) “determining whether an originating party has used said telephone to request a call connection to a terminating party”; and

(b) “deactivating the power supplied to the display based on a determination in step (a) that the originating party has requested said call connection to the terminating party.”

Claim 3 is deemed to be patentable over the cited references for at least the same reasons.

The other rejected claims in this application are each dependent from independent claims 1 or 3 discussed above and are therefore likewise deemed to be patentable for the same reasons. Claim 2 has been amended to add back language inadvertently omitted in the prior amendment dated October 10, 2002.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.


Amendment
Serial No. 09/621,384

Docket No. 5000-1-110.

In the event that any additional fee is required to continue the prosecution of this Application as requested, please charge such fee to Deposit Account No. 502-470. If the Examiner has any questions regarding this Application, it is respectfully requested that the Applicants' attorney of record be contacted at the below-noted telephone number.

Respectfully submitted,

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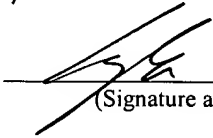
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Twice Amended) A battery saving method of controlling the display of a portable telephone having a SEND key and a display configured to be supplied with power, comprising the steps of:

checking whether a user of said telephone activates [a] said SEND key [for a call origination to establish a call] to originate a call from said telephone; and

deactivating the power supplied to the display [when] in response to said [a] call [is set up according to the] being originated from said telephone due to said activation of [the] said SEND key [; and,

activating the power supplied to the display when the call is terminated].

2. (Twice Amended) The battery saving method as claimed in Claim 1, further comprising the step of deactivating the power supplied to the display after the expiration of a predetermined time period if the SEND key is activated.

3. (Amended) A method for saving battery lifetime by controlling the power supplied to the display unit of a portable telephone, the display unit being configured to be supplied with power, the method comprising the steps of:

(a) determining whether an originating party has used said telephone to request

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[requested] a call connection to a terminating party; and

(b) deactivating the power supplied to the display [if] based on a determination in step (a) that the originating party [requests] has requested said [the] call connection to the terminating party [; and ,

(c) activating the power supplied to the display when the call connection is terminated].